

State of Washington  
REPORT OF EXAMINATION  
FOR WATER RIGHT CHANGE

File NR CG4-29544  
WR Doc ID 4924717

Added or Changed Point of Withdrawal/Diversion

PRIORITY DATE  
December 11, 1987

WATER RIGHT NUMBER  
CG4-29544P

MAILING ADDRESS  
PUBLIC UTILITY DISTRICT NO. 1 OF CHELAN COUNTY  
327 N WENATCHEE AVE  
PO BOX 1231  
WENATCHEE WA 98807-1231

SITE ADDRESS (IF DIFFERENT)  
Daroga State Park  
Orondo WA 98843

Total Quantity Authorized for Withdrawal or Diversion

WITHDRAWAL OR DIVERSION RATE	UNITS	ANNUAL QUANTITY (AC-FT/YR)
60	GPM	5

Purpose

PURPOSE	WITHDRAWAL OR DIVERSION RATE		UNITS	ANNUAL QUANTITY (AC-FT/YR)		PERIOD OF USE (mm/dd)
	ADDITIVE	NON-ADDITIVE		ADDITIVE	NON-ADDITIVE	
Community Domestic	60		GPM		5	01/01 - 12/31

REMARKS

Community domestic supply to include campsites, restrooms, and 1 residence.

IRRIGATED ACRES		PUBLIC WATER SYSTEM INFORMATION	
ADDITIVE	NON-ADDITIVE	WATER SYSTEM ID	CONNECTIONS
0	0		

Source Location

COUNTY							WATERBODY		TRIBUTARY TO			WATER RESOURCE INVENTORY AREA	
DOUGLAS							GROUNDWATER			44-MOSES COULEE			
SOURCE FACILITY/DEVICE		PARCEL		WELL TAG	TWP	RNG	SEC	QQ Q	LATITUDE	LONGITUDE			
Well #1		26213310001		BCF-652	26N	21E	33	NESE	47.70545	-120.20278			
											Datum: NAD83/WGS84		

Place of Use (See Attachment 1 for Map)

PARCEL (NOT LISTED FOR SERVICE AREAS)

26213310001

LEGAL DESCRIPTION OF AUTHORIZED PLACE OF USE

Daroga State Park (See Attachment 2)

Proposed Works

Well #1: The proposed well, which is already drilled and will replace the originally-authorized Well #3, is drilled to 103 feet deep with an 8-inch casing and a 3-inch PVC mainline, which will lead to a 40,000-gallon underground storage tank that is approximately 3,500 feet to the north. The proposed well is intended to be outfitted with a submersible turbine pump to serve campsites at the Daroga State Park, two restroom facilities, and 1 residence.



### Development Schedule

#### BEGIN PROJECT

Begun

#### COMPLETE PROJECT

September 1, 2014

#### PUT WATER TO FULL USE

September 1, 2016

### Measurement of Water Use

How often must water use be measured?

Weekly

How often must water use data be reported to Ecology?

Upon Request by Ecology

What volume should be reported?

Total Annual Volume

What rate should be reported?

Annual Peak Rate of Withdrawal (gpm)

### Provisions

#### Wells, Well Logs and Well Construction Standards

All wells constructed in the state must meet the construction requirements of WAC 173-160 titled "Minimum Standards for the Construction and Maintenance of Wells" and RCW 18.104 titled "Water Well Construction." Well #3, which is will permanently be discontinued **must be decommissioned**.

All unused wells within the boundaries of Daroga State Park must be properly decommissioned in compliance with WAC 173-160.

All wells must be tagged with a Department of Ecology unique well identification number. If you have an existing well and it does not have a tag, please contact the well-drilling coordinator at the regional Department of Ecology office issuing this decision. This tag must remain attached to the well. If you are required to submit water measuring reports, reference this tag number.

Installation and maintenance of an access port as described in WAC 173-160- 291(3) is required. An airline gage may be installed in addition to the access port.

#### Measurements, Monitoring, Metering and Reporting

An approved measuring device must be installed and maintained for each of the sources identified by this water right in accordance with the rule "Requirements for Measuring and Reporting Water Use," WAC 173-173, which describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements.

Water use shall be recorded weekly and maintained by the applicant or property owner for a minimum of five years. The maximum rate of withdrawal and the annual total volume shall be submitted to the Department of Ecology by January 31<sup>st</sup> of each calendar year.

Recorded water use data shall be submitted via the Internet. To set up an Internet reporting account, contact the Central Regional Office (CRO). If you do not have Internet access, you can still submit hard copies by contacting CRO for forms to submit your water use data.

WAC 173-173 describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition the Department of Ecology for modifications to some of the requirements.

#### Water Use Efficiency

The water right holder is required to maintain efficient water delivery systems and use of up-to-date water conservation practices consistent with RCW 90.03.005.



**Proof of Appropriation**

The water right holder must file the notice of Proof of Appropriation of water (under which the certificate of water right is issued) when the permanent distribution system has been constructed and the quantity of water required by the project has been put to full beneficial use. The certificate will reflect the extent of the project perfected within the limitations of the water right. Elements of a proof inspection may include, as appropriate, the source(s), system instantaneous capacity, beneficial use(s), annual quantity, place of use, and satisfaction of provisions.

**Schedule and Inspections**

Department of Ecology personnel, upon presentation of proper credentials, will have access at reasonable times, to the project location, and to inspect at reasonable times, records of water use, wells, diversions, measuring devices and associated distribution systems for compliance with water law.

**Real Estate Excise Tax**

This decision may indicate a Real Estate Excise Tax liability for the seller of water rights. The Department of Revenue has requested notification of potentially taxable water right related actions, and therefore will be given notice of this decision, including document copies. Please contact the state Department of Revenue to obtain specific requirements for your project. Phone: (360) 570-3265. The mailing address is: Department of Revenue, Real Estate Excise Tax, P. O. Box 47477, Olympia WA 98504-7477 Internet: <http://dor.wa.gov/>. E-mail: [REETSP@DOR.WA.GOV](mailto:REETSP@DOR.WA.GOV).

**General Conditions**

Withdrawal of water under this right may be limited or otherwise regulated in favor of senior rights.

This authorization to make use of public waters of the state is subject to existing rights, including any existing rights held by the United States for the benefit of Indians under treaty or otherwise.

Although this well is in hydraulic continuity with the surface waters of the Columbia River, this appropriation will not be subject to the provisions of the Columbia River Instream Resources Protection Program because WAC 173-563-020(4) specifically exempts domestic supply.

Withdrawal of water under this right may be limited or otherwise regulated in favor of senior rights.

This authorization to make use of public waters of the state is subject to existing rights, including any existing rights held by the United States for the benefit of Indians under treaty or otherwise.



**Findings of Facts**

Upon reviewing the investigator's report, I find all facts, relevant and material to the subject application, have been thoroughly investigated. Furthermore, I find the change of water right as recommended will not be detrimental to existing rights or the public welfare.

Therefore, I ORDER the requested change to add a point of withdrawal under Change Application No. CG4-29544, subject to existing rights and the provisions specified above.

**Your Right To Appeal**

You have a right to appeal this Order to the Pollution Control Hearings Board (PCHB) within 30 days of the date of receipt of this Order. The appeal process is governed by Chapter 43.21B RCW and Chapter 371-08 WAC. "Date of receipt" is defined in RCW 43.21B.001(2).

To appeal you must do the following within 30 days of the date of receipt of the Order.

File your appeal and a copy of this Order with the PCHB (see addresses below). Filing means actual receipt by the PCHB during regular business hours.

- Serve a copy of your appeal and this Order on Ecology in paper form - by mail or in person. (See addresses below.) E-mail is not accepted.
- You must also comply with other applicable requirements in Chapter 43.21B RCW and Chapter 371-08 WAC.

Street Addresses	Mailing Addresses
<b>Department of Ecology</b> Attn: Appeals Processing Desk 300 Desmond Drive SE Lacey, WA 98503	<b>Department of Ecology</b> Attn: Appeals Processing Desk PO Box 47608 Olympia, WA 98504-7608
<b>Pollution Control Hearings Board</b> 1111 Israel RD SW Ste 301 Tumwater, WA 98501	<b>Pollution Control Hearings Board</b> PO Box 40903 Olympia, WA 98504-0903

Signed at Yakima, Washington, this \_\_\_\_\_ day of \_\_\_\_\_ 2012.

\_\_\_\_\_  
Mark Kemner, LHG, Section Manager  
Water Resources Program/CRO

For additional information visit the Environmental Hearings Office Website: <http://www.eho.wa.gov>. To find laws and agency rules visit the Washington State Legislature Website: <http://www1.leg.wa.gov/CodeReviser>.



## BACKGROUND

This report serves as the written findings of fact concerning Water Right Application Number CG4-29544.

On August 12, 2011, the Department of Ecology (Ecology) received a request from the applicant to add up to 3 test wells to replace the original well, Well #3, which is currently authorized under Ground Water Permit No. G4-29544P. The application was accepted and assigned Control No. CG4-29544.

On September 21, 2011, Ecology issued a Preliminary Permit to drill 3 test wells (Well #1, Well #2a, and Well #2b) in order to assess water quality and yield of the proposed groundwater sources under this subject application.

On March 14, 2012, Ecology received a letter from the Office of Drinking Water, requesting Ecology to consider the subject application for priority processing. The original well (Well #3) is stated as having exceeded the Nitrate maximum contamination level of 10.0 mg/L set by the Environmental Protection Agency (EPA); therefore, a new well was proposed as a substitute for installing Nitrate treatment to the existing well.

Via an email dated March 16, 2012, Ecology received a request to amend the original application submitted to Ecology to represent a change in point-of-withdrawal from Well #3 to Well #1 as the results of the first test well were successful, rendering the drilling of the additional 2 test wells unnecessary.

This application qualifies for expedited processing under WAC 173-152, whereby Water Right Change Applications may be processed prior to applications submitted at an earlier date when the change or transfer, if approved, would result in providing public water supplies to meet general needs of the public for regional areas.

**Table 1: "Existing" Water Right Attributes**

<b>Water Right Owner</b>	Chelan County Public Utility District No. 1
<b>Priority Date</b>	12/11/1987
<b>Place of Use</b>	Daroga State Park—Parcel No. 26213310001, Douglas County (See Attachment 2)

<b>County</b>	<b>Waterbody</b>	<b>Tributary To</b>	<b>WRIA</b>
Douglas	Groundwater		44-Moses Coulee

<b>Purpose</b>	<b>Rate</b>	<b>Unit</b>	<b>Ac-ft/yr</b>	<b>Begin Season</b>	<b>End Season</b>
Community Domestic	60	GPM	5	01/01	12/31

<b>Source Name</b>	<b>Parcel</b>	<b>Well Tag</b>	<b>Twp</b>	<b>Rng</b>	<b>Sec</b>	<b>QQ Q</b>	<b>Latitude</b>	<b>Longitude</b>
Well #3	26213310001	AFE-485	26N	21E	33	NE	47.71091	-120.20248

CFS = Cubic Feet per Second; Ac-ft/yr = Acre-feet per year; Sec. = Section; QQ Q = Quarter-quarter of a section; WRIA = Water Resource Inventory Area; E.W.M. = East of the Willamette Meridian; Datum in NAD83/WGS84.



**Table 2: "Requested" Water Right Attributes**

<b>Applicant Name</b>	Chelan County PUD 1 *
<b>Date of Application</b>	8/12/2011
<b>Place of Use</b>	Daroga State Park—Parcel No. 26213310001, Douglas County (See Attachment 2)

<b>County</b>	<b>Waterbody</b>	<b>Tributary To</b>	<b>WRIA</b>
Douglas	Groundwater		44-Moses Coulee

<b>Purpose</b>	<b>Rate</b>	<b>Unit</b>	<b>Acre-feet/yr</b>	<b>Begin Season</b>	<b>End Season</b>
Community Domestic	60	GPM	5	01/01	12/31

<b>Source Name</b>	<b>Parcel</b>	<b>Well Tag</b>	<b>Twp</b>	<b>Rng</b>	<b>Sec</b>	<b>QQ Q</b>	<b>Latitude</b>	<b>Longitude</b>
Well #1	26213310001	BCF-652	26N	21E	33	NE SE	47.70545	-120.20278

CFS = Cubic Feet per Second; Ac-ft/yr = Acre-feet per year; Sec. = Section; QQ Q = Quarter-quarter of a section; WRIA = Water Resource Inventory Area; E.W.M. = East of the Willamette Meridian; Datum in NAD83/WGS84.

#### Legal Requirements for Requested Change

The following is a list of requirements that must be met prior to authorizing the proposed change in point-of-withdrawal:

- Water must be physically available.
- There must be no impairment of existing rights.
- The water use must be beneficial.
- The water use must not be detrimental to the public interest.

#### **Public Notice**

RCW 90.03.280 requires that notice of a water right application be published once a week, for two consecutive weeks, in a newspaper of general circulation in the county or counties where the water is to be stored, diverted, and used. Notice of this application was published in *The Wenatchee World* of Wenatchee, Washington on March 27 and April 3, 2012. No comments or protests were received by Ecology during the 30-day comment period.

#### **State Environmental Policy Act (SEPA)**

A water right application is subject to a SEPA threshold determination (i.e., an evaluation whether there are likely to be significant adverse environmental impacts) if any one of the following conditions is met:

- (a) It is a surface water right application for more than 1 cubic foot per second, unless that project is for agricultural irrigation, in which case the threshold is increased to 50 cubic feet per second, so long as that irrigation project will not receive public subsidies.
- (b) It is a groundwater right application for more than 2,250 gallons per minute.
- (c) It is an application that, in combination with other water right applications for the same project, collectively exceed the amounts above.
- (d) It is a part of a larger proposal that is subject to SEPA for other reasons (e.g., the need to obtain other permits that are not exempt from SEPA).
- (e) It is part of a series of exempt actions that, together, trigger the need to do a threshold determination, as defined under WAC 197-11-305.



Because this application does not meet any of these conditions, it is categorically exempt from SEPA and a threshold determination is not required.

#### ***Water Resources Statutes and Case Law***

RCW 90.03.380(1) states that a water right that has been put to beneficial use may be changed. The point of diversion, place of use, and purpose of use may be changed if it would not result in harm or injury to other water rights.

The Washington Supreme Court has held that Ecology, when processing an application for change to a water right, is required to make a tentative determination of extent and validity of the claim or right. This is necessary to establish whether the claim or right is eligible for change. *R.D. Merrill v. PCHB* and *Okanogan Wilderness League v. Town of Twisp*.

RCW 90.44.100 allows Ecology to amend a ground water permit to (1) allow the user to construct a replacement or additional well at a new location outside of the location of the original well, or to (2) change the manner or place of use of the water, if:

- (a) The additional or replacement well taps the same body of public ground water as the original well. RCW 90.44.100(2)(a).
- (b) Where a replacement well is approved, the user must discontinue use of the original well and properly decommission the original well. RCW 90.44.100(2)(b).
- (c) Where an additional well is constructed, the user may continue to use the original well, but the combined total withdrawal from all wells shall not enlarge the right conveyed by the original permit or certificate. RCW 90.44.100(2)(c).
- (d) Other existing rights shall not be impaired. RCW 90.44.100(2)(d).

When changing or adding points of withdrawal to groundwater rights (RCW 90.44.100), or when consolidating exempt wells with an existing permit or certificate (RCW 90.44.105), the wells must draw from the *same body of public groundwater*. Indicators that wells tap the *same body of public groundwater* include:

- (a) Hydraulic connectivity.
- (b) Common recharge (catchment) area.
- (c) Common flow regime.
- (d) Geologic materials that allow for storage and flow, with recognizable boundaries or effective barriers to flow.

## **INVESTIGATION**

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### ***Site Visit***

A site visit was performed on September 11, 2012, by Candis Graff and Ron Dixon from Ecology. Waikele Franz and Ray Heit from Chelan County PUD No. 1 were also present. Surrounding geology was noted, photos were taken, and GPS coordinates were recorded.



## History of Water Use

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Daroga Park (Park) is located along the eastern shore of Lake Entiat parallel to the Columbia River, approximately 8 miles north of the town of Orondo, Washington. The Chelan County PUD-owned land that is currently the Park was once owned by Grady Auvil of Auvil Fruit Company. In 1987, Chelan County PUD acquired approximately 150 acres for the development of Daroga Park. Auvil Fruit retained approximately 40.5 acres of orchard and shop facilities west of State Highway 97, which is also within the Park's authorized place-of-use.

Daroga State Park is a 90+-acre camping park with 1.5 miles of Columbia River shoreline on the elevated edge of the desert "scablands" and accommodates boaters, picnickers, and other recreationalists. Day-use facilities include restrooms, a picnic shelter, boat dock and ramp, tennis court, and a swimming area. Camping facilities include both motorized and tent camping; all utility sites have water/electric hookups. The park has 17 tent spaces, which are located on the "island" and may be accessed by boat or by walking across either of two land bridges, 28 utility spaces, one RV dump station, four restrooms, and 12 showers.

The Park is divided into three sections for administrative purposes. The north park area comprises the majority of Daroga Park, and is located mostly with the northern  $\frac{3}{4}$  of Section 33, T. 26 N., R. 21 E.W.M. The southeastern area is referred to as the south park area and is situated within Sections 33, 34, and Section 3, T. 25 N., R. 21 E.W.M. The island area is connected to the north park and the south park via 2 narrow land bridges.

The irrigation wells for the day-use area, authorized under Certificate No. **G4-29543C**, are located within the NE $\frac{1}{4}$  of Section 33. Both wells are enclosed in metal vaults with air vents. These two irrigation wells are plumbed together into a single system, which irrigate the north park and the day-use (island) area. There is a pre-existing well located just southeast of the day-use irrigation well, which is capped and may be held in reserve for future park expansion.

The south end of Daroga Park is served by a well, authorized under Permit No. **G4-30153P**, and is located within the NE $\frac{1}{4}$ NE  $\frac{1}{4}$  of Section 3, T. 25 N., R. 21 E.W.M, more specifically in the front yard of the Park ranger's dwelling. This well irrigates up to 20 acres south of the southern land bridge and west of the highway. The well also authorizes group domestic water for the ranger's home, a storage shed, the picnic shelter, and standpipes for group camping facilities; however, the applicant states that due to the same rising nitrate levels in this well, the domestic portion of this permit is using the new, proposed well, which is the subject of this application. They will need to file a change application with Ecology or the Douglas County Conservancy Board to make this point-of-withdrawal a permanent change.

Desert Canyon Utility Company operates 2 wells within the boundaries of the Park property. These wells are 2 of 4 authorized under Permit Nos. G4-25768(A)P and G4-31009P and are located a few feet from the Chelan PUD's Well #3. They are housed in a cement building, which is kept locked, and used to irrigate and provide multiple domestic use across the highway in Sections 27 and 34.

There are a few old and unused wells in the Daroga Park area. Some of these wells were inundated when the Lake Entiat reservoir was filled.



## Proposed Use

The application that is the subject of this Report of Examination (ROE) requests authorization to change the point-of-withdrawal from an 8-inch well, 70 feet deep and enclosed in a metal vault located north of the south line of the NE¼NE¼ of Section 33 to a well located on the "island," approximately 200 feet from surface water and 240 feet from the nearest restroom vault. Like the existing well, the proposed well is intended to serve the north park domestic needs, including restrooms, drinking water for the day-use area and campsites, and the park ranger's residence.

## Other Rights Appurtenant to the Place of Use

Table 1: Rights Appurtenant to POU

Control #	Document Type	Purpose	Qa	Source	Comment
G4-30153P	Permit	DM, IR	83	1 Well	Chelan PUD
G4-29543C	Certificate	IR	200	2 Wells	Chelan PUD
G4-29616C	Certificate	MU (38 homes)	38	1 Well	Auvil Fruit
G4-31186	New App.	FP, HP	-----	1 Well	Auvil Fruit
G4-CV2P651	Cert of Change	DG, IR	260	1 Well	Auvil Fruit
G4-CV2P650	Cert of Change	DM, IR	100	1 Well	Auvil Fruit
CG4-CCVOL2P650	Change/ROE	IR	100	1 Well	Auvil Fruit
CG4-CCVOL2P651	Change/ROE	IR	260	1 Well	Auvil Fruit
G4-CV2P652	Cert of Change	IR	200	1 Well	Auvil Fruit
CG4-CCVOL2P652	Change/ROE	IR	200	1 Well	Auvil Fruit
CG4-23189C	Change/ROE	IR	512	1 Well	Auvil Fruit
G4-004613CL	Claim/Long	IR	0	1 Well	Auvil Fruit
S4-23308C	Certificate	FP	13	Lake Entiat	Auvil Fruit
CS4-23308C	Change/ROE	FP	13	1 Well	Auvil Fruit
G4-30100C	Certificate	FP	17	1 Well	Auvil Fruit
G4-29281P	Permit	FP	50.4	1 Well	Auvil Fruit
G4-35189	New App.	MU	38	1 Well	Auvil Fruit
G4-35184	New App.	FP	50.4	1 Well	Auvil Fruit
G4-35190	New App.	FP	17.7	1 Well	Auvil Fruit
G4-026947CL	Claim/Long	DG, IR	14	1 Well	Larsen
G4-25768(A)	Permit	IR	1960	3 Wells	Utility Co.
G4-31009P	Permit	DM, IR, RE, SR		3 Wells	Utility Co.

DM=Domestic Multiple, IR=Irrigation, RE=Recreation/Beautification, SR=Storage, FP=Frost Protection, MU=Municipal, DG=Domestic General

### Water Rights Owned by Auvil Fruit Company

**G4-29616C:** authorizes up to 38 homes within the SE¼NE¼ of Section 33, although through aerial photography it appears may not be currently used for this purpose.

**G4-29281:** authorizes frost protection for agricultural land located in Section 27, 28, and 33, lying east of the highway and outside the boundaries of the Park.

**CG4-23189C:** authorizes irrigation for up to 100 acres in the NW¼ of Section 34, but no irrigation is being provided within the Park's boundaries.

**S4-23308C & CS4-23308:** authorize frost control for an orchard situated within the SE¼ of Section 33 but outside the current boundaries of the Park.

**G4-30100C:** authorizes frost protection in Section 34, outside of the Park's boundaries.

**CG4-CV2P650, CG4-CV2P651, and CG4-CV2P652:** 650 defines the place of use of irrigation of 25 acres to Section 28 and the NE¼NE¼ of Section 33, 651 defines the place of use of irrigation of 65 acres to



Sections 27 and 28, and 652 defines the place of use of irrigation of 50 acres to Section 34, and within the E½NE¼SE¼ of Section 33 to the east of the highway, and within the N½NW¼ of Section 3.

**G4-004613CL:** is a claim for up to 20 acres of irrigation to be used on the E½ of Section 33; however, the intent of the Claims Registration Act (RCW 90.14) was to record water uses that predated the enactment of the state water code (in the case of ground water, 1945). The date of first putting water to use was identified on Water Right Claim No. 004613 as being 1961. At that time, the only way to obtain a state-issued water right was to go through the permitting process; therefore, Ecology cannot consider Water Right Claim No. 004613 as a valid water right. The final determination of the extent and validity of a water right claim rests with the superior court through the adjudication process.

#### Other Water Rights

**G4-026947CL:** was filed in 1973 by Fed Larsen. This filing claims the use of a well for domestic supply and the irrigation of 3.5 acres. ). The date of first putting water to use was identified on Water Right Claim No. 26947 as being 1956. At that time, the only way to obtain a state-issued water right was to go through the permitting process; therefore, Ecology cannot consider Water Right Claim No. 26947 as a valid water right. The final determination of the extent and validity of a water right claim rests with the superior court through the adjudication process.

**G4-25768(A):** permits up to 3 wells, one of which is in Section 33 but just outside the Park's boundaries near Well #3. Purpose of use is documented as irrigation of 490 acres within Sections 34 and 27.

**G4-31009P:** permits up to 3 wells, once of which is identical to the well for Permit No. G4-25768(A) and allows community domestic, beautification of a golf course, and filling of water hazard lakes, all within Sections 27 and 34.

#### Hydrologic/Hydrogeologic Evaluation

Impairment to other ground water rights is not anticipated as a result of this change; however, to meet the expectations of both the water right holder proposing to change the water right and other water right holders ("no impairment") competing for the same source of water, it is necessary to consider the hydrologic effects between the old system and the new system. Through this analysis, an understanding can be gained of the potential for the addition in POW and the water delivery system to affect other water right holders. Finally, a conclusion whether impairment would occur and what conditions might prevent it can then be formulated. The following hydrologic/hydrogeologic sections were prepared in a technical memorandum dated September 12, 2012, by licensed hydrogeologist, Ron Dixon and seeks to address, by way of discussion, analysis, and evaluation, same body of groundwater, physical availability, and potential for impairment to existing water users.

#### Same Body of Groundwater

Section 90.44.100 of the Revised Code of Washington requires that an additional or new well, authorized through an amendment to an existing permit or certificate, must tap the same body of public groundwater as the original point of withdrawal (POW). Based on the analysis above, the original POW under the subject water right captures water from an unconsolidated sand and gravel aquifer that is adjacent to and hydraulically connected to the Columbia River. The proposed POW will capture groundwater from the same unconsolidated sand and gravel aquifer.



### Impairment Considerations

Impairment results from an adverse impact on the physical availability of water to a senior water right holder who is beneficially using water within the authorized quantities. A water right application may not be approved if it would:

- Interrupt or interfere with the availability of water to an adequately constructed groundwater withdrawal facility of an existing right. An adequately constructed groundwater withdrawal facility is one that (a) is constructed in compliance with well construction requirements and (b) fully penetrates the saturated zone of an aquifer or withdraws water from a reasonable and feasible pumping lift.
- Interrupt or interfere with the availability of water at the authorized point of diversion of a surface water right. A surface water right conditioned with instream flows may be impaired if a proposed use or change would cause the flow of the stream to fall to or below the instream flow more frequently or for a longer duration than was previously the case.
- Interrupt or interfere with the flow of water allocated by rule, water rights, or court decree to instream flows.
- Degrade the water quality of the source to the point that the water is unsuitable for beneficial use by existing users (e.g., via sea water intrusion).

### Impairment Discussion

Under the current authorization the applicant is permitted to withdraw 5 acre feet (ac-ft) annually at a maximum instantaneous rate of 60 gallons per minute (gpm). Under other permitting actions there may be an additional 3 ac-ft authorized for withdrawal from the subject well for a total of 8 ac-ft. The instantaneous quantity under both authorizations is expected to be no more than 100 gpm. Pumping continuously at a rate of 100 gpm from the well would exhaust the proposed annual quantity of 8 ac-ft in approximately 18 days. An evaluation of possible pumping interference with nearby wells as a result of the permitting action was accomplished using the Theis non-equilibrium equation, corrected for unconfined conditions, and the parameters listed below. Results indicate that pumping at a rate of 100 gpm would potentially draw the water table down less than 0.5 feet at a distance of 500 feet. If the well is pumped in cycles or if it is pumped at less than the instantaneous rate of 100 gpm, the predicted effect would be reduced. The closest well in the vicinity of the subject well is approximately 1,000 feet from the subject well.

#### Modeled Parameters:

- Pumping Rate – 100 (gpm)
- Annual quantity – 8 (ac-ft)
- Hydraulic Conductivity – 5,000 to 10,000 (gallons per day per square foot)
- Saturated Thickness – 70 to 100 (feet)
- Aquifer Specific Yield – 0.15 (dimensionless)



### Public Interest Considerations

When investigating an application to change a ground water right, Ecology must examine the impact such a change will have on the public interest (RCW 90.44.100).

Public interest issues are commonly articulated in the form of protest letters, but Ecology received no letters of public protest. Other public interest issues can include a wide range of factors that may include such things as water quality. Water quality can be associated with a ground water change; however, this change is being initiated to avoid poor water quality, specifically Nitrate contamination, which is consistent with Department of Health's Drinking Water Program's mission of assuring a safe drinking water supply. The change in POW is unlikely to negatively impact the quality of water withdrawn under Ground Water Permit No. G4-29544P.

### *Consideration of Protests and Comments*

No protests were filed against this application.

### Conclusions

In accordance with RCW 90.03 and 90.44, the author of this Report of Examination (ROE) makes a tentative determination that Ground Water Permit No. G4-29544P is a valid permit and is eligible for change. Water is physically available from the Columbia River system via the unconsolidated sand and gravel aquifer that the proposed well will utilize. The proposed well will withdraw water from the same body of ground water as the originally-authorized well. Domestic supply is a beneficial use. Due to the extensive nature of the source from which water is requested, this change of point of withdrawal should have no significant affect on existing rights or minimum flows established by the Columbia River Instream Resources Protection Program. Approval of this change request as provisioned above will not be detrimental to the public interest.



## **RECOMMENDATIONS**

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Based on the above investigation and conclusions, I recommend that this request for a water right be approved in the amounts and within the limitations listed below and subject to the provisions listed above

### ***Purpose of Use and Authorized Quantities***

The amount of water recommended is a maximum limit and the water user may only use that amount of water within the specified limit that is reasonable and beneficial:

- 60 gallons per minute (gpm).
- 5 acre-feet per year (ac-ft/yr).
- Continuous community domestic.

### **Point of Withdrawal**

NE¼, SE¼, Section 33, Township 26 North, Range 21 E.W.M.

### **Place of Use**

As described on **Attachment 2** of this ROE.

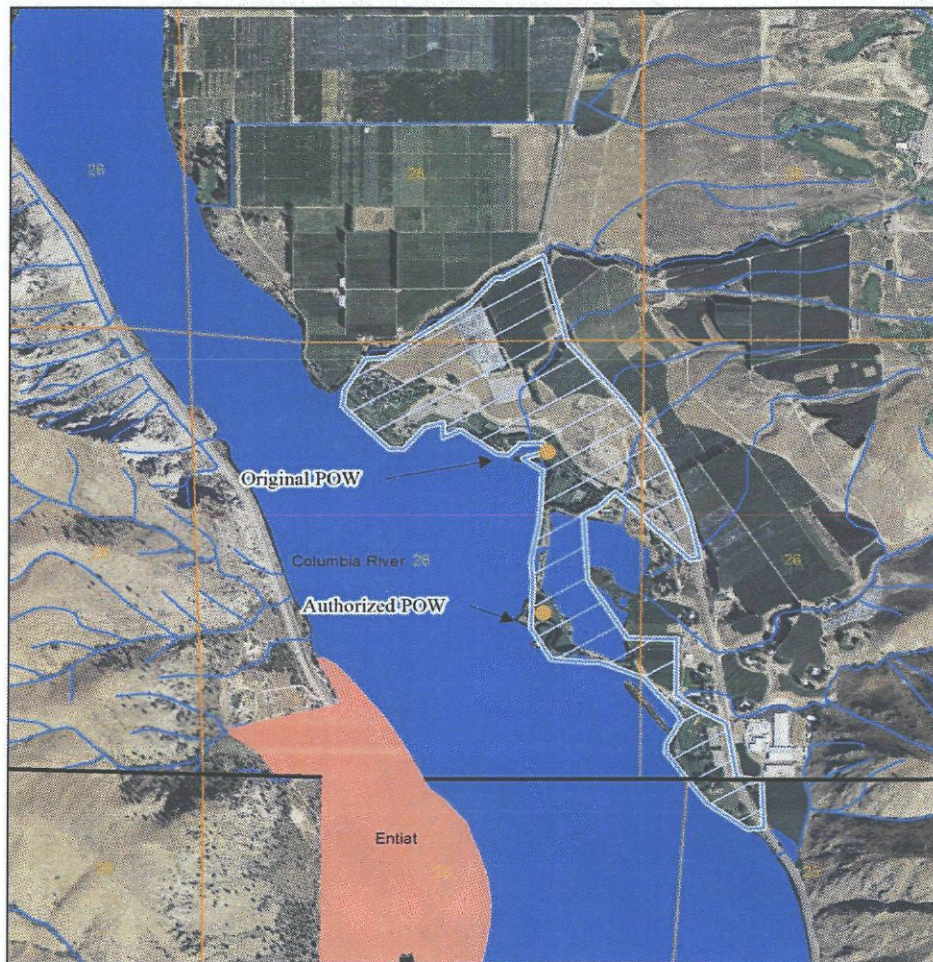
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Report Writer

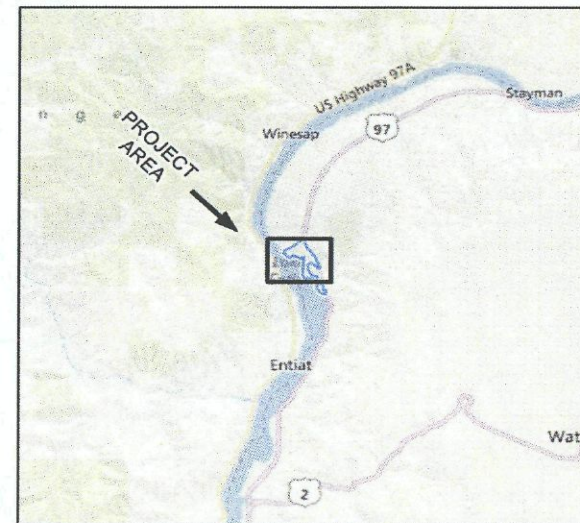
Date

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Chelan County Public Utility District No. 1  
CG4-29544  
T26N/R21E  
WRIA 44 - Douglas County



**Legend**

- Authorized Place of Use
- Authorized Point of Withdrawal
- Townships
- Sections
- Water Bodies
- City

Basemap - (Bing Maps Road)

ATTACHMENT 1

**Comment:**  
Place of use and source locations are as defined within the Report of Examination cover sheet for the document identified in the header above.



## ATTACHMENT 2--LEGAL DESCRIPTION FOR PLACE OF USE

All of Section 33, T. 26 N., R. 21 E.W.M. lying west of State Highway SR21, Chelan Falls to Orondo, and lying east of the Columbia River, EXCEPT that portion of Government Lot 1 of said Section, lying northwesterly of a draw which extends from the approximately north quarter corner southwesterly to the Columbia River, together with the west half of Section 34, lying westerly of SR21. Also, a tract of land in Section 28 described as follows: Beginning at the southeast corner of said Section 28; thence westerly along the south line of said Section 28 for 902.29 feet to the west right-of-way (ROW) line of SR21, and the True Point of Beginning; thence south  $89^{\circ}19'30''$  west along the south line of said Section 28 for 1733.46 feet to the south quarter corner of said Section 28; thence continuing west along the south line of Section 28 approximately 75 feet to the center line of a major draw which is the north line of the District's ownership; thence northeasterly along the center line of the bottom of said draw in a northeasterly direction to the west ROW line of SR21; thence southeasterly along said ROW line to its intersection with the south line of Section 28 and the True Point of Beginning, also the end of this description. All of the above-described lands are located in T. 26 N., R. 21 E.W.M. Also, the north half of Government Lot 4 in Section 3, T. 25 N., R. 21 E.W.M.

EXCEPTING from each of the above-described descriptions the following described tract which lies within them: Commencing at Station PE 853+85.11 (Mon. 75) on the Project Boundary Traverse Line of Rocky Reach Dam and on the south line of said Section 34, a brass cap in a concrete monument that bears south  $89^{\circ}42'00''$  west for 1782.04 feet from the south quarter corner of said Section 34; thence north  $89^{\circ}42'00''$  east along the south line of said Section 34 for 121.36 feet to the westerly ROW of Secondary State Highway No. 10 (SR151); thence along said ROW on a spiral chord bearing north  $11^{\circ}40'03''$  west for 317.46 feet to a point; thence north  $79^{\circ}51'12''$  east along said ROW for 35.00 feet to a point; thence north  $10^{\circ}08'48''$  west along said ROW for 385.67 feet to a point, the TRUE POINT OF BEGINNING FOR THIS DESCRIPTION; thence north  $63^{\circ}32'05''$  west for 245.44 feet to a point; thence north  $66^{\circ}48'55''$  west for 174.93 feet to a point; thence north  $42^{\circ}01'41''$  west for 170.21 feet to a point; thence north  $44^{\circ}49'32''$  west for 58.97 feet to a point; thence north  $00^{\circ}47'00''$  west for 104.57 feet to a point; thence north  $00^{\circ}43'34''$  east for 347.82 feet to a point; thence north  $08^{\circ}11'36''$  east for 207.49 feet to a point; thence north  $89^{\circ}47'44''$  west for 631.21 feet to a point; thence north  $30^{\circ}44'39''$  west for 875.84 feet to a point; thence north  $01^{\circ}58'08''$  west for 782.11 feet to a point; thence north  $21^{\circ}20'29''$  east for 42.26 feet to a point; thence north  $60^{\circ}44'32''$  east for 113.25 feet to a point; thence south  $85^{\circ}09'14''$  east for 87.40 feet to a point; thence north  $04^{\circ}50'44''$  east for 49.25 feet to a point; thence north  $43^{\circ}08'45''$  east for 113.31 feet to a point; thence north  $55^{\circ}20'09''$  east for 91.70 feet to a point; thence south  $70^{\circ}18'51''$  east for 829.83 feet to said ROW; thence southeasterly along said ROW on a curve to the right with a radius of 2812.99 feet and a central angle of  $03^{\circ}47'05''$  to a point, bearing south  $12^{\circ}02'20''$  east for 185.78 feet; thence south  $10^{\circ}08'48''$  east along said ROW for 460.70 feet to a point; thence south  $79^{\circ}51'12''$  west along said ROW for 10.00 feet to a point; thence south  $10^{\circ}08'48''$  east along said ROW for 700.00 feet to a point; thence north  $79^{\circ}51'12''$  east along said ROW for 10.00 feet to a point; thence south  $10^{\circ}08'48''$  east along said ROW for 400.00 feet to a point; thence north  $79^{\circ}51'12''$  east along said ROW for 10.00 feet to a point; thence south  $10^{\circ}08'48''$  east along said ROW for 829.32 feet to the TRUE POINT OF BEGINNING. The above-described exception contains approximately 52.29 acres.



TOGETHER WITH that portion of the S ½ NW ¼ and the N ½ SW ¼ of Section 34, T. 26 N., R. 21 E.W.M., more particularly described as follows: Commencing at Station PE 853+85.11 (Mon. 75) on the Project Boundary Traverse Line of Rocky Reach Dam and on the south line of said Section 34, a brass cap in concrete monument that bears south 89°40'31" west for 1781.32 feet from the south quarter corner of said Section 34; thence north 89°40'31" east along said south line for 121.54 feet; thence north 11°44'30" west for 317.63 feet to a point on the westerly ROW margin of Secondary State Highway No. 10 (SR151); thence north 79°55'57" east for 75.00 feet to a point on the center line of said Secondary State Highway; thence north 10°04'03" west along said center line for 2410.69 feet; thence south 79°55'57" west for 50.00 feet to the west margin of said Secondary State Highway and the TRUE POINT OF BEGINNING; thence north 90°00'00" west for 100.00 feet; thence north 41°26'59" west for 1048.59 feet; thence south 70°19'20" east for 735.46 feet to a point on said west margin and the beginning of a non tangent curve to the right whose central angle point bears south 76°12'20" west a radial distance of 2815.00 feet; thence along said west margin and said curve to the right for 183.11 feet; thence continuing along said west margin south 10°04'03" east for 364.80 feet to the TRUE POINT OF BEGINNING. Said lands containing approximately 4.92 acres.

Subject to all easements of record.

All situated in Douglas County, Washington.